Maps are the workbench on which theories of epidemic and endemic disease have long been fashioned, and then tested. In the map a disparate congress of patients with symptoms is transformed into a single event whose origins can be interrogated and whose progress tracked across the city, state, and world.

Disease Maps: Epidemics on the Ground is not a history of medical cartography. Mapping, in this new history is not an afterthought to the research but integral to it. My new book is, instead, a history of cartography as medicine written from the perspective of the medical workbench itself.

Whether it is a community outbreak of gastroenteritis, a flu epidemic that crosses the continent, or a pandemic like cancer, this book argues, understanding follows a cartographic course. We study it in the same way, transforming the records of symptom incidence into a single event class that is then mapped against geographic and socioeconomic environments.

We learned to do this, first, in the sixteenth century and developed the skills in the seventeenth. By the eighteenth century disease mapping was becoming a standard tool of epidemic and then endemic disease studies that have grown, into the present century, as a principle method of our knowing.

In my previous book in this area, Cartographies of Disease: Maps, Mapping, and Medicine (2005), I created a history of disease maps. In this volume I place that history within a history of medicine and socioeconomic evolution to create a new theory of the history of disease as we have come to understand it.

PAUL ROBBINS (CLARK, 1996)

TOM KOCH (CLARK, 1971)
Challenging Convention & Changing the World

Geography & Global Environmental Studies professor Dianne Rocheleau, along with five students, traveled to Cancun, Mexico from December 4-11 for the Global Alternative Forum for Life & Environmental Social Justice.

The forum was an opportunity for Dianne and these students to gain exposure to an eclectic presentation of environmentally and humanely conscientious solutions to global crises.

Clark students who attended the forum were Callista Perry, Celina Grisi, Robert Huttick, Ashley Trull, and Jordan Reeves.

This grassroots collaborative gave voice to the small farmers and peasants of Latin America whose lives and agricultural prosperity had been adversely affected by climate change.

Caravans had travelled nationally and internationally, stopping at indigenous and struggling places in order to share the knowledge of these endeavors with the people attending the forum.

As well as being able to partake in the forums, Dianne and a few of the students were also able to volunteer as interpreters for some of the Spanish-speaking presenters. According to IDSC grad student Jordan Reeves, “It was such a neat example of self organization.” Via Campesina, along with volunteers, made radios available so that people could have access to the translations being transmitted through separate radio

Photos courtesy of Dianne Rocheleau

continued on page 5
channels. This coordination and display of community only reinforced the group’s focus on social and environmental grassroots participation.

Dianne Rocheleau reflected that “the time spent at the Via Campesina sponsored Alternative Climate Forum in Cancun was truly educational for all of us. It was a pleasure to travel, contribute and learn in the company of the five curious, committed and engaged people who, with me, constituted this group. I hope that we can make this kind of endeavor a common way for faculty and students to share learning experiences through engagement with contemporary social movements for social, environmental and climate justice.”

The Global Alternative Forum was held parallel to the U.N. Climate Change Conference (COP16) as a way to share creative, community-based solutions to climate change, as well as to protest carbon markets and industrial agriculture & forestry as “false solutions” favored by the official forum.

The five students were not only impressed by the organization and fortitude of the people volunteering at and attending this alternative to COP16, but also felt fortunate to be able to hear the people’s stories first-hand. It was a chance to step outside academia and gain exposure to the substantive issues that brought them to their studies in the first place.

Callista Perry, a Global Environmental Studies senior, felt challenged to consider issues such as food sovereignty and small sustainable farming on a more personal level, and this insight and knowledge will only improve her research and her positive impact on the world.

get involved:

- Contact Professor Dianne Rocheleau (drocheleau@clarku.edu) to learn more about the Global Environmental Studies major, part of the School of Geography at Clark U.
- Learn more about Via Campesina.
- Read Callista and Ashley’s Cancun Climate blog.
Read about how this doctoral student is leaving his snowy footprints in Antarctic climate and environmental research:

1. **What does your research involve?**

My research involves studying cryospheric interactions of the Antarctic. I’m interested in how changes in the ocean might manifest in changes in the land-based ice of Antarctica, and vice versa. Specifically, how does sea ice variability influence surface melting on the ice sheet? Also, how do surface melt and changes in the ocean surface affect the dynamics of outlet glaciers that are heavily contributing to present sea level rise? To answer these questions, I am employing a suite of remote-sensed and field observations. Some of the field work I completed in Antarctica can be used to ground truth the satellite measurements, allowing for a more comprehensive understanding and interpretation of the data.

2. **How did you become interested in climate/environmental research, especially as it pertains to the Antarctic cryosphere?**

The polar regions are integral components of the global climate system and knowledge about them is critical to understanding potential manifestations of climate change. We know that many of the most rapidly changing environments are at high latitudes, yet there’s a great deal of uncertainty surrounding them. Part of this uncertainty is due to the logistical difficulties of polar field work, which has been greatly alleviated by the advent of remote sensing. Both of these factors make polar regions interesting from a scientific standpoint, and the fact that I like cold places doesn’t hurt. I can trace my interest in the poles back to an incredible fieldwork experience I had in the Arctic during my undergraduate years.

3. **What would you like to accomplish with your research?**

I hope that my research can contribute to a better understanding of the Antarctic as a coupled ice-ocean-atmosphere system, integrated in the global climate system.

4. **How difficult is it to perform environmental-based research in such a harsh climate? What precautions do you take to protect yourself and your research?**

It’s all relative -- any field work is going to have its share of difficulties. The harshness of Antarctica is actually alleviated a great deal by logistical support from the NSF. We were provided with great cold weather gear, including excellent sleeping bags and tents. I would say that if you can camp in the northeast, you can camp in the deep field of Antarctica without a problem -- just bring some hand warmers.

5. **How are you using what you learned from your research back here at Clark?**

Specifically, the data I collected are useful for understanding the near surface properties of the snow and firn and how they affect measurements from satellites. More generally, traveling to remote areas of the Antarctic ice sheet instilled a great appreciation for the continent’s enormous size and beauty.

For more information, read the archive of Clark’s News & Media Relations article about Luke’s research expedition.

**photo courtesy of Luke Trusel**
The Guide to the Major

This spring, the Guide to the Major underwent a complete overhaul. We’ve modified the worksheets and have restructured the program. Check out the updates online or in the Geography Department main office (JF220B).

Undergraduate Happenings & Upcoming Events

- The Gamma Theta Upsilon (GTU) induction ceremony was held on Wednesday, April 20th at 3:30pm. Eight students were inducted this year: Dylan Broderick, Kimberly Burrowes, Elena Cohen, Ariel Feingold-Shaw, Christina Geller, Brendan Golubjatnikov, Jane Allegra Heye, and Michelle Smith.

- CUGA hosted their annual Where in the World is Carmen Sandiego? Trivia Night, also on Wednesday, April 20th. This year’s winner was Geography major Daniel Snyder. He won a bicycle GPS unit! Email clarkCUGA@gmail.com to get involved in future CUGA events.

- Academic Spree Day is Wednesday, April 27th. Come see the creative work and research of your fellow classmates!

spring 2011 graduating seniors:

Geography: Jesse Adelman, Ronald Bathrick, Gerald Buker, Kimberly Burrowes, Alicia Cavanaugh, Tomothy Cole, Victoria Corke, Anna Creedon, Ariel Feingold-Shaw, Gregory Golding, Brendan Golubjatnikov, Abigail Kaminski, Colette Mauboussin, Lila Milukas, Claudia Olcese Lira, Ya’ara Persing, Michelle Smith, Daniel Snyder, Elliot Steinhardt

Global Environmental Studies: Justine Bernhardt, Erin Callison, Deanna Goldner, Callista Perry, Emily Schweitzer, Hannah Tirrell-Wysocki

Earth Systems Science Track: Angela Marshall, Margaret Small
Phd Geography
1987
Paul Kariya

It's been an interesting journey since I left Clark, but I also feel like I never quite left. Once a Clarkie, always a Clarkie; it's a perspective thing. During the 30 years since I left campus I have been intrigued by and involved with people and places engaged and struggling with reconciling the local versus the structural across a range of issues.

Last month I was at Cambridge University in the UK, attending trustee meetings for a Christian environmental organization (A Rocha) I serve. We are working in 20 countries with local peoples on environmental problems. Last week I was meeting with First Nations in Metro Vancouver who hold unextinguished Aboriginal rights and title to the lands and resources in the region. They have asked me to be a facilitator as they try to work with each other and with senior governments who are upgrading the regional highway network. This week I met with 2 of 5 graduate students who I help supervise on their research; one involving the role of not-for-profits in social change and the other interpreting leadership culture in strategic planning in large organizations. And my day job is where I am the Executive Director of the association trying to help develop an industry around clean fuels for electricity generation in BC, run-of-river hydro, wind, bio-mass, solar, geothermal and wave and tidal. It's a challenging dialogue on the west coast of Canada where we have an abundance of large scale hydro electric power developed by one public utility. Obtaining and maintaining social license for privately developed clean energy is a key part of my job – it’s a lot of fun as I interact with politicians, senior government officials, First Nations, local governments and ENGO reps.

I left Clark to undertake dissertation research and moved to Northern British Columbia to live and work with Aboriginal peoples (Haida, Nisga’a, Tsimshian, Gitxsan, Tahltan, Haisla) and loved it so much it took me 8 years to complete my PhD in 1988. While I have had opportunities to take up academic positions I have chosen to work as an applied geographer. Throughout my work career however, I have taught and undertaken research at Carleton, Ottawa, Northern British Columbia, Simon Fraser and Trinity Western Universities.

I have held some fascinating positions at the interface of public policy development and service delivery working with Aboriginal peoples, fishermen, and local communities. After a succession of positions in Canada’s federal public service, in 1994 I took a job as the first Executive Director of the BC Treaty Commission, a quaNGO established by Canada, British Columbia and First Nations to act as a neutral facilitator for a modern day treaty negotiation process. In 1998 I accepted the role as CEO of a new provincial crown corporation named Fisheries Renewal BC to work with BC's fishing communities to see if we could protect and restore BC’s fisheries and ensure that every fish caught was a valuable fish (for Aboriginal needs) and also for value added products and marketing to the World (commercial caught and recreational caught). In 2002 I joined Canada’s premier ENGO working for Pacific salmon sustainability. Along the way I have also served as a Commissioner on the Pacific Salmon Commission (overseeing the treaty between Canada and US). In 2009 I joined Clean Energy BC.

Duane Knos, Anne Buttimer, Bob Kates and Saul Cohen were special teachers in my formation of a Clarkie perspective coming out of the 1970’s and 80’s. I remember Duane challenging me to get my feet wet with real world research versus a “quickie” library dissertation (txs Duane, it took me 8 years). I recall a chat with Bob about students needing to grow through experience, meaning, don’t come back with a paper that exactly responds to the dissertation proposal because that would mean I had learned very little – it’s messy out there. Anne got me to focus on what was existentially real in my life -- an immigrant fisherman’s son, growing up on the West Coast of Canada with Aboriginal peoples and resource development and environmental challenges. And for the brief time in the School of Geography’s history when I was around, Saul was the leader. Many years later it was terrific to drive him around Chicoutimi, PQ at a joint AAG/CAG meeting; he in his New York duds and me in a jack shirt and boots in the hinterland of Quebec.

Thanks Clark, from the fishermen's son. Can we change the World?
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@clarku